



भारत सरकार  
Government of India  
विद्युत मंत्रालय  
Ministry of Power  
पूर्वी क्षेत्रीय विद्युत समिति  
**Eastern Regional Power Committee**  
14, गोल्फ क्लब रोड, टॉलीगंज, कोलकाता-700033  
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**NO. ERPC/PROTECTION/2018/**

**DATE: 05.09.2018**

**FAX MESSAGE NO. - 387**

To,

As per list enclosed.

**Sub: Notice for 71<sup>st</sup> Protection Coordination sub-Committee (PCC) meeting of ERPC**

Notice is hereby given that **71<sup>st</sup> PCC meeting** of ERPC will be held on **19<sup>th</sup> September 2018 (Wednesday)** at 10: 30 hrs at **ERPC Conference Room, Kolkata.**

The tentative agenda items for discussion will be as follows:

- 1) Confirmation of the minutes of 70<sup>th</sup> Protection sub-Committee Meeting of ERPC
- 2) Follow-up action on decision of previous Protection sub-Committee Meetings
- 3) Analysis of following grid disturbances of August, 2018:

SI No	Date	Time	Affected System	Summary	Load loss (MW)	Gen loss (MW)	Fault duration (As Per PMU)
1	08-08-2018	05:49	JUSNL	After 220 kV bus PT burst at Chandil, 220 kV STPS - Chandil S/C, 220 kV Ramchandrapur Chandil S/C and 220 kV Ranchi Chandil S/C were hand tripped leading to power interruption at Chandil	150	0	--
2	12-08-2018	05:31	ISTS	400 kV Binaguri-Rangpo-II tripped on B-N fault at 05:31 hrs resulting operation of SPS - I which tripped all units except one unit at Teesta III, one unit at Tashiding, Dikchu, Chujachen and Jorethang. Even after successful operation of SPS-I SPS - II operated at 05:52 hrs causing tripping of 400 kV Teesta III Rangpo S/C which led to black out of Teesta III and Dikchu generation complex	0	1020	<100
3	15-08-2018	13:00	BSPTCL	220 kV Darbhanga - Motipur D/C tripped causing load loss at Sitamari, Dhaka and Siohar	103	0	<100
4	15-08-2018	13:35	BSPTCL	220 kV Darbhanga - Darbhanga - I tripped from Darbhanga end only causing load loss of 140 MW at Darbhanga, Madhubani, Pandual, Jainagar and Jaleswar.	98	0	<100

SI No	Date	Time	Affected System	Summary	Load loss (MW)	Gen loss (MW)	Fault duration (As Per PMU)
5	19-08-2018	15:26	ISTS	400 kV Farakka - Kahalgaon I & II tripped from Farakka end only. At same time, 400 kV Farakka - Sagardighi II tripped from Sagardighi end. It is suspected there was a B-N fault in 400 kV Farakka Kahalgaon I & II and auto reclose was successful at Kahalgaon end. Sagardighi end sensed the same fault in Z-III and tripped from Sagardighi end. As per PMU data, fault was cleared within 100 ms. Tripping of 400 kV Farakka Sagardighi II from Sagardighi end may be explained.	0	0	<100
6	19-08-2018	15:47	ISTS	400 kV MPL - Ranchi - II tripped from MPL end only. At same time, 400 kV MPL - Maithon D/C tripped from Maithon end. It is suspected there was a Y-N fault in 400 kV MPL - Ranchi - II and auto reclose was successful at Ranchi end. Maithon end sensed the same fault in Z-III and tripped from Maithon end. As per PMU data, fault was cleared within 100 ms. Tripping of 400 kV MPL - Maithon D/C from Maithon end may be explained.	0	0	<100
7	21-08-2018	18:13	ISTS	400 kV Bus - I at Bolangir S/S was under shutdown for connecting new bays of 125 MVA B/R with existing bus through jumpering. At 18:13 hrs 400/220 kV both ICT I & II tripped on OTI, WTI & Bucholtz trip relay due to temporary DC Earth fault resulting loss of total power failure at 400 kV level as 400 kV lines were connected through main and tie bays of ICTs with bus II.	0	0	--
8	22-08-2018	14:59	ISTS	At 15:00 hrs 400/132 kV ICT-II at Motihari tripped due to operation of OSR relay resulting tripping remaining ICT - I on overload current relay operation.	280	0	--
9	31-08-2018	13:57	OPTCL	220 kV Joda Ramchandrapur S/C and 220 kV Bokaro Jamshedpur were not in service. 220 kV Joda - TTPS D/C tripped on Y-B-N fault resulting increase in power flow through 220 kV Jamshedpur Jindal S/C. As a result 132 kV Jamshedpur - Chandil D/C and 132 kV Purulia - CTPS D/C tripped due to overload.	450	0	--

4) Single line tripping incidences of August 2018 is enclosed at **Annexure-I**.

You are requested to kindly furnish the detail report along with all records (SLD, SOE, DR, Relay and schematic diagram of auxiliary supply, wherever applicable) related to above trippings for meaningful analysis during the meeting. You are also requested to upload the details in on-line tripping incident reporting system implemented in Protection Database Management System [www.erpc-protectiondb.in](http://www.erpc-protectiondb.in).

Your participation in the meeting is highly solicited. Please confirm your participation in the meeting along with name and designation of the participants.

Yours faithfully,

-Sd-

**(J. Ganeswara Rao)**  
**Executive Engineer**

**LIST OF ADDRESSES:**

Chief Engineer, Trans (O&M) Bihar State Power Transmission Limited, Vidyut Bhawan, Bailey Road, Patna-800021	Electrical Superintending Engineer (CRITL) Bihar State Power Transmission Limited, Vidyut Bhawan, Bailey Road, Patna-800021
Chief Engineer (SLDC) Damodar Valley Corporation, GOMD-I Premises, P.O.- Danesh Seikh Lane, Howrah- 711109	Chief Engineer (CTC) Damodar Valley Corporation, P.O. Maithon Dam, Dist. Dhanbad, Jharkhand-828207
Chief Engineer, (CRITL) Jharkhand Urja Sancharan Nigam Limited Kusai Colony, Doranda, Ranchi-834002	Electrical Superintending Engineer (CLD) Jharkhand Urja Sancharan Nigam Limited, Kusai Colony, Doranda, Ranchi-834002
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Chief Load Dispatcher, SLDC OPTCL, P.O. Mancheswar Rly. Colony Bhubaneswar-751017	Chief Engineer (Testing), WBSETCL Central Testing Laboratory, Abhikshan, Salt Lake, Kolkata-700091 ( Fax no. 2367-3578/1235 )
Chief Engineer (CLD) WBSETCL, P.O. Danesh Sheikh Lane, Andul Road, Howrah-711109	Addl. Chief Engineer (ALDC) West Bengal Electricity Distribution Company Ltd Vidyut Bhavan, 7 <sup>th</sup> Floor, Bidhannagar, Sector-I Salt Lake City, Kolkata-700091(Fax-033-2334-5862)
Dy. Chief Engineer (Testing)/ Sr. Manager (Testing) CESC Ltd.,4, Sasi Sekhar Bose Road, Kolkata-700025	General Manager (O&M) KhSTPS, NTPC Ltd., P.O. Deepti Nagar, Dist. Bhagalpur, Bihar-813203
General Manager(O&M) FSTPS, NTPC Ltd., P.O. Nabarun, Dist. Murshidabad, West Bengal-742236	Dy. General Manager ( Engineering), WBPDC, OS Dept. Corporate Office, 3/C,L.A Block, Salt Lake-III, Kolkata-700098 ( Fax-033-23350516)
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General Manager(O&M), TSTPS, NTPC Ltd., P.O.Kaniha, Dist. Angul, Orissa-759117	General Manager (O&M), POWERGRID, Odisha Projects, Sahid Nagar, Bhubaneswar – 751 007
General Manager(OS), ERHQ-I, NTPC Ltd., Loknayak Jaiprakash Bhawan, (2 <sup>nd</sup> Floor), Dak Bunglow Chawk, Patna-800001	Manager (Electrical), Adhunik Power & Natural Resources Ltd. “Lansdowne Towers, Kolkata-700020 ( Fax No. 033-2289 0285)
Executive Director (O&M) NHPC Ltd., NHPC Office Complex, Sector-33, Faridabad, Haryana-121003 ( Fax-01292272413 )	Electrical Superintending Engineer, TTPS, Tenughat Vidyut Nigam Ltd., Lalpania, Dist. Bokaro, Jharkhand-829149
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Executive Director, ERLDC, POSOCO, Tollygunge, Kolkata-700033	Head Construction, ENCIL, Siliguri-7340051
General Manager (OS), ER-II Power Grid Corporation of India Ltd., J-I-15, Block-EP, Sector-V, Salt Lake, Kolkata-91	Shri A.K.Nayak/Shri Sumit S Ghosh Maithon Power Limited, Maithon Office, MA 5 Gogna, Dist. Dhanbad, Jharkhand State, PIN-828207
General Manager (P&O), PTC Ltd., Kanchanjunga Bldg., 18, Barakhamba Road,	Vice President, Vedanta Ltd. 1 <sup>st</sup> Floor, Module C/2, Fortune Tower, C S Pur,

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Managing Director, Bhutan Power Corporation Post Box no. 580, Thimpu, Bhutan.	Managing Director, Druk Green Power Corprn. P.O. Box-1351, Thimpu, Bhutan.
General Manager, Darbhanga(Bihar), Darbhanga Motihari Transmission Company Limited (DMTCL)	Shri Brajesh Kumar Pande, Plant Head, JITPL. (FAX:011-26139256-65)
Shri D. P. Bhagava, Chief Consultant (O&M), Teesta Urja Limited, New Delhi (FAX:011-46529744)	Director (GM Division), Central Electricity Authority Sewa Bhawan, R. K. Puram, New Delhi-110066
Director (NPC), CEA, NRPC Building, Katwaria Sarai, New Delhi- 110016	President, Dans Energy Pvt. Ltd, 5th Floor, DLF Building No. 8, Tower-C, Gurgaon - 722002
Director, Shiga Energy Pw. Ltd., 5th Floor, DLF Building No. 8, Tower-C, Gurgaon - 722002	DGM (E&I), HALDIA ENERGY LIMITED, BARIK BHAWAN, KOKATA-700072, FAX: 033-22360955

**CC:**

ASSISTANT SECRETARY, ERPC		
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## List of line tripping in the month of August 2018 which may be discussed in PCC

LINE NAME	TRIP DATE	TRIP TIME	RESTORATION DATE	RESTORATION TIME	Relay Indication LOCAL END	Relay Indication REMOTE END	Reason	Fault Clearance time in msec	Auto Recloser status	Remarks
<b>Multiple tripping at the same time</b>										
<a href="#">400KV JEERAT-SAGARDIGHI-I</a>	14-08-2018	18:05	14-08-2018	19:15			No reason furnished	--		No fault observed in PMU
<a href="#">400KV JEERAT-NEW CHANDITALA-SC</a>	14-08-2018	18:05	14-08-2018	18:15			No reason furnished	--		No fault observed in PMU
<a href="#">400KV FARAKKA-SAGARDIGHI-DC</a>	19-08-2018	15:26			B-N , Z-3 , F/C-3KA , F/D 110 KM FROM	DID NOT TRIPPED FROM FSTPP	B-N Fault	<100 msec	No A/R operation	
<a href="#">400KV FSTPP-KHSTPP-I</a>	19-08-2018	15:26	19-08-2018	17:00	TRIPPED FROM ONLY FSTPP END		TRIPPED FROM ONLY FSTPP END	<100 msec		
<a href="#">400KV FSTPP-KHSTPP-II</a>	19-08-2018	15:26	19-08-2018	16:51	TRIPPED FROM ONLY FSTPP END		TRIPPED FROM ONLY FSTPP END	<100 msec		
<a href="#">400KV RANCHI-MAITHON RB-II</a>	19-08-2018	15:47	19-08-2018	15:49	Y-N,Z-2 FRM RANCHI , F/D-177KM , F/C-3.2KA, A/R		Y-N Fault		No A/R operation	
<a href="#">400KV MAITHON-MAITHON RB-I</a>	19-08-2018	15:47	19-08-2018	16:03	TRIPPED FROM ONLY MAITHON	Y-N,Z-3,F/D-145KM AT MAITHON	Y-N Fault		No A/R operation	
<a href="#">400KV MAITHON-MAITHON RB-II</a>	19-08-2018	15:47	19-08-2018	16:00	TRIPPED FROM ONLY MAITHON	Y-N,Z-3,F/D-145KM AT MAITHON	Y-N Fault		No A/R operation	
<b>Miscellaneous: Tripping on DT, No Fault observed in PMU</b>										
<a href="#">400KV MAITHON-KHSTPP-I</a>	06-08-2018	22:07	06-08-2018	22:48	Spurious , DT sent and receipt both		Spurious , DT sent and receipt both	--		No fault observed in PMU
<a href="#">400KV MAITHON-KHSTPP-II</a>	06-08-2018	23:54	07-08-2018	0:49			No reason furnished	--		No fault observed in PMU
<a href="#">220KV BARIPADA-BALASORE-II</a>	09-08-2018	19:18	09-08-2018	19:59	Tripped from Balasore end only		Tripped from Balasore end only	--		No fault observed in PMU
<a href="#">400KV MEERAMUNDALI-JSPL-II</a>	18-08-2018	23:08	18-08-2018	23:39	DT received at Meramundali		DT received at Meramundali	--		No fault observed in PMU
<a href="#">400KV PUSAULI(PG)-VARANASI-I</a>	19-08-2018	22:46	20-08-2018	0:06	O/V relay Operated. Voltage: 426 KV (North Bus) at Pusaui		Over Voltage	--		
<a href="#">400KV PUSAULI(PG)-VARANASI-I</a>	20-08-2018	2:47	20-08-2018	11:51	O/V relay Operated. Voltage: 431 KV (North Bus) at Pusaui		Over Voltage	--		
<a href="#">220KV PUSAULI-SAHUPURI-SC</a>	25-08-2018	11:01	25-08-2018	12:43	Tripped from Sahupuri end only.		Tripped from Sahupuri end only.	--		No fault observed in PMU
<a href="#">220KV DARBHANGA (DMTCL)-MOTIPUR-I</a>	30-08-2018	12:39	30-08-2018	13:05	DT RECEIVED AT DMTCL	CB CLOSED AT MOTIPUR	DT RECEIVED AT DMTCL	--		No fault observed in PMU
<a href="#">220KV BUDHIPADAR-KORBA-I</a>	31-08-2018	2:20	31-08-2018	3:30	DT RECEIVED AT BUDHIPADAR		DT RECEIVED AT BUDHIPADAR	--		No fault observed in PMU
<b>Autoreclose related issues</b>										
<a href="#">400KV MEERAMUNDALI-STERLITE-II</a>	06-08-2018	17:01	06-08-2018	17:28	SUCCESSFUL A/R	Y-N FAULT, 2.2 KA, 129 KM,	Y-N Fault	< 100 msec	No A/R operation	
<a href="#">220KV BINAGURI-SILIGURI-I</a>	08-08-2018	12:52	08-08-2018	13:05		B-N, 1.36KM, 4KA	B-N Fault	< 100 msec	No A/R operation	
<a href="#">400KV NEW DUBURI-MEERAMUNDALI-I</a>	09-08-2018	9:40	09-08-2018	21:28	New Duburi z1 B-N IB 4.52 ka 77 km	did not trip from Meramundali end	B-N Fault	< 100 msec	No A/R operation	
<a href="#">220KV DARBHANGA (DMTCL)-MOTIPUR-I</a>	09-08-2018	10:24			did not trip from Darbhanga End	Z1, 12 KM,R-N,IR 4.7 KA	R-N fault	< 100 msec	No A/R operation	
<a href="#">400KV KHARAGPUR-CHAIBASA-I</a>	10-08-2018	10:27	10-08-2018	11:05	RN,Z1, 2.835 KA,7.9 KA	RN, Z2,181.3 KM,1.934 KA	R-N fault	< 100 msec	No A/R operation	
<a href="#">400KV ROURKELA-CHAIBASA-I</a>	12-08-2018	15:58	12-08-2018	16:05	R-N,37.28KM ,6.9 KA A/R SUCCESSFUL	R-N,Z1,97.5KM,2.81 KA,NO A/R ATTEMPT	R-N fault	< 100 msec	No A/R operation	
<a href="#">400KV MEERAMUNDALI-STERLITE-II</a>	13-08-2018	17:56	13-08-2018	18:38	Z1,B-N FAULT,15.84 KA,10 KM @ VEDANT	A/R successful	B-N Fault	< 100 msec	No A/R operation	
<a href="#">400KV TSTPP-MEERAMUNDALI-SC</a>	14-08-2018	12:17	14-08-2018	13:08	A/R successful	B-N,FD 32.2 KM,FC 10.72 KA @ MRMDL	B-N Fault	< 100 msec	No A/R operation	
<a href="#">220KV BARIPADA-BALASORE-I</a>	14-08-2018	16:06	14-08-2018	16:41	R_N, 2.83 ka, 50 KM		R-N fault	< 100 msec	No A/R operation	
<a href="#">400KV KOLAGHAT-ARAMBAGH-SC</a>	17-08-2018	13:47	17-08-2018	14:01	Y_N, 40.81 KM, 5.25 kA , A/R successful	Y_N, 22.54 KM, 6.91 kA	Y-N Fault	< 100 msec	No A/R operation	
<a href="#">400KV DARBHANGA (DMTCL)-MUZAFFARPUR-II</a>	18-08-2018	11:09	18-08-2018	15:03	B-n, z1, 33.8 km, 3.58 kA	B-n, 40.09 km, 5.4 kA	B-N Fault	< 100 msec	No A/R operation	
<a href="#">400KV KOLAGHAT-ARAMBAGH-SC</a>	22-08-2018	14:03	22-08-2018	14:18	A/r successful		R-N fault	< 100 msec	No A/R operation	
<a href="#">400KV JEERAT-SAGARDIGHI-SC</a>	25-08-2018	6:26	25-08-2018	7:13	2.4 KA,B-N,Z-1,139 KM, A/R successful	B-N,Z-1,42.61KM	B-N Fault	< 100 msec	No A/R operation	
<a href="#">400KV KOLAGHAT-ARAMBAGH-SC</a>	25-08-2018	11:11	25-08-2018	11:28	Y_N Fault, 35.2 KM, 5.5 kA	A/r successful	Y-N Fault	< 100 msec	No A/R operation	
<a href="#">400KV RANCHI-RAGHUNATHPUR-III</a>	29-08-2018	20:31	29-08-2018	20:51	A/R successful at ranchi end			< 100 msec	No A/R operation	
<a href="#">220KV BUDHIPADAR-RAIGARH-I</a>	31-08-2018	1:06	31-08-2018	2:20	R-N,1.9KA,83KM FRM RAGARH		R-N Fault	--	No A/R operation	No fault observed in PMU